

Interview Summary	Application No. 09/991,702	Applicant(s) PALUMBO ET AL.	
	Examiner Sikyln Ip	Art Unit 1742	

All participants (applicant, applicant's representative, PTO personnel):

(1) Sikyln Ip.

(3) KLAUS TOMANTSCHGER

(2) Mr. Eric Spector.

(4) _____

Date of Interview: 13 October 2004.

Type: a) ☐ Telephonic b) ☐ Video Conference
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.

If Yes, brief description: _____

Claim(s) discussed: All.

Identification of prior art discussed: All.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.


Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

- * ① Will allow in new claims with RCT
(copy attached)
② Wants data in declaration form
③ Will consider position that if anneal
cut over 80 in Yasuda, get detrimental
results in paste

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


Examiner's signature, if required

PROPOSED EXTRA CLAIMS FOR 09/991,702

1. Lead or lead alloy having a percentage of special grain boundaries which is at least 20% of the total grain boundaries of said lead or lead alloy, said lead alloy being alloyed with at least one element selected from the group consisting of Ag, Al, As, Ba, Bi, Ca, Cd, Cu, Fe, Li, Mg, Na, Se, Sb, Sn, Sr and Zn.

2. The lead or lead alloy of Claim 1 having a percentage of special grain boundaries which is at least 30% of the total grain boundaries of said lead or lead alloy (see 10/19-21).

3. The lead or lead alloy of Claim 2 having a percentage of special grain boundaries which is at least 40% of the total grain boundaries of said lead or lead alloy (see 10/19-21).

4. The lead or lead alloy of Claim 3 having a percentage of special grain boundaries which is at least 50% of the total grain boundaries of said lead or lead alloy (see 10/19-21).

5. The lead or lead alloy of Claim 1 which has been annealed to obtain the percentage of special grain boundaries, said lead or lead alloy having a hardness after annealing which is not greater than the hardness of said lead or lead alloy before annealing (11/6-10).

6. The lead or lead alloy of Claim 2 which has been annealed to obtain the percentage of special grain boundaries, said lead or lead alloy having a hardness after annealing, which is not greater than the hardness of said lead or lead alloy before annealing (11/6-10).

7. The lead or lead alloy of Claim 3 which has been annealed to obtain the percentage of special grain boundaries, said lead or lead alloy having a hardness after annealing, which is not greater than the hardness of said lead or lead alloy before annealing (11/6-10).

8. The lead or lead alloy of Claim 4 which has been annealed to obtain the percentage of special grain boundaries, said lead or lead alloy having a hardness after annealing, which is not greater than the hardness of said lead or lead alloy before annealing.

9. The lead or lead alloy of Claim 1 obtained from a mass of lead or lead alloy at least a portion of which has been deformed below the solvus temperature of the lead or lead alloy.

10. The lead or lead alloy of Claim 9 where said deforming takes place by rolling, extruding, expanding, punching, or peening said lead or lead alloy.

11. The lead or lead alloy of Claim 1 obtained from a billet extruded to a strip of desired thickness while maintaining the strip at a temperature up to the solvus temperature of the lead or lead alloy which strip is optionally deformed by rolling, expanding, punching, bending or peening below the solvus temperature of the lead or lead alloy.

12. The lead or lead alloy of Claim 1 which is in the form of a positive current collector, or a strap, lug or post for use in a lead-acid battery.

13. A current collector constituted of the lead or lead alloy of Claim 1 in the form of : a continuous cast grid, a continuous rolled grid, an extruded strip, a strip perforated using expansion or punching, a foil, sheet, a bookmold grid, a tubular grid, an expanded gridd, a connector or a non-consumable electrode for use in an electrochemical cell.